

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A reinforced laminate adapted for an electronic support, the laminate comprising:

(a) a matrix material; and

(b) at least one non-degreased fabric comprising at least one strand comprising a plurality of fibers, wherein said at least one non-degreased fabric has an air permeability, measured according to ASTM D 737, of no greater than 10 standard cubic feet per minute per square foot, and wherein at least a portion of the fabric has a resin compatible coating which is compatible with the matrix material in the reinforced laminate adapted for the electronic support, and the resin compatible coating comprises a plurality of particles,

wherein said particles are formed from materials selected from:

non-polymeric inorganic materials selected from graphite, metals, carbides, nitrides, borides, sulfides, carbonates, sulfates, and mixtures thereof;

polymeric inorganic materials;

polymeric organic materials;

non-polymeric organic materials;

composite materials; and

mixtures of any of the foregoing, and

wherein the particles have a Mohs' hardness value which does not exceed the Mohs' hardness value of any glass fiber in the at least one strand, and

the particles have an average particle size sufficient to allow strand wet out.

2. (Canceled).

3. (Canceled).

4. (Withdrawn) A reinforced laminate according to claim 3, wherein the polymeric inorganic materials are selected from polyphosphazenes, polysilanes, polysiloxane, polygermanes, polymeric sulfur, polymeric selenium, silicones and mixtures of any of the foregoing.

5. (Canceled).

6. (Withdrawn) A reinforced laminate according to claim 3, wherein the polymeric organic materials are selected from thermosetting materials, thermoplastic materials, and mixtures thereof.

7. (Withdrawn) A reinforced laminate according to claim 6, wherein the polymeric organic materials are thermosetting materials selected from thermosetting polyesters, vinyl esters, epoxy materials, phenolics, aminoplasts, thermosetting polyurethanes, and mixtures of any of the foregoing.

8. (Withdrawn) A reinforced laminate according to claim 6, wherein the polymeric organic materials are thermoplastic materials selected from thermoplastic polyesters, polycarbonates, polyolefins, acrylic polymers, polyamides, thermoplastic polyurethanes, vinyl polymers, and mixtures of any of the foregoing.

9. (Withdrawn) A reinforced laminate according to claim 3, wherein the composite materials are selected from particles that have a hardness at their surface that is different from the hardness of the internal portions of the particle beneath its surface.

10. (Withdrawn) A reinforced laminate according to claim 9, wherein the composite materials are selected from particles formed from a primary material that is coated, clad or encapsulated with at least one secondary material.

11. (Withdrawn) A reinforced laminate according to claim 9, wherein the composite materials are selected from particles formed from a primary material that is coated, clad or encapsulated with a differing form of the primary material.

12. (Previously Presented) A reinforced laminate according to claim 1, wherein the particles have a thermal conductivity of at least 1 Watt per meter K at a temperature of 300 K.

13. (Canceled).

14. (Canceled).

15. (Previously Presented) A reinforced laminate according to claim 1, wherein the particles have an average particle size, measured according to laser scattering techniques, ranging from 0.1 to 5 microns.

16. (Previously Presented) A reinforced laminate according to claim 1, wherein the resin compatible coating further comprises at least one lubricious material different from the plurality of particles.

17. (Previously Presented) A reinforced laminate according to claim 1, wherein the resin compatible coating further comprises at least one film-forming material.

18. (Currently Amended) A reinforced laminate according to claim 1, wherein the resin compatible coating has a loss on ignition of ranging from 0.1 to 1.6; ~~and said at least one non-degreased fabric has an air permeability, measured according to ASTM-D 737, of no greater than 10 standard cubic feet per minute per square foot.~~

19. (Previously Presented) A reinforced laminate according to claim 1, wherein the resin compatible coating further comprises a resin reactive diluent.

20. (Previously presented) A reinforced laminate according to claim 19, wherein the resin reactive diluent is a lubricant comprising one or more functional groups capable of reacting with an epoxy resin system and selected from the group consisting of amine groups, alcohol groups, anhydride groups, acid groups and epoxy groups.

21. (Withdrawn) A method of forming a reinforced laminate adapted for an electronic support comprising:

(a) obtaining a fabric adapted to reinforce an electronic support by weaving at least one fill yarn comprising a plurality of fibers and having a first resin compatible coating on at least a portion of the at least one fill yarn and at least one warp yarn comprising a plurality of fibers and having a second resin compatible coating on at least a portion of the at least one warp yarn;

(b) at least partially coating at least a portion of the fabric with a matrix material resin;

(c) at least partially curing the at least partially coated fabric to form a prepreg layer; and

(d) laminating two or more prepreg layers together to form a laminate adapted for use in the electronic support.

22. (Withdrawn) A prepreg for an electronic support comprising

(a) a matrix material; and

(b) at least one non-degreased fabric comprising at least one strand comprising a plurality of fibers, wherein at least a portion of the fabric has a coating which is compatible with the matrix material.

23. (Withdrawn) A prepreg according to claim 22, wherein the compatible coating comprises a plurality of particles.

24. (Withdrawn) A prepreg according to claim 23, wherein the particles are formed from materials selected from polymeric inorganic materials, non-polymeric inorganic materials, polymeric organic materials, non-polymeric organic materials, composite materials and mixtures of any of the foregoing.

25. (Withdrawn) A prepreg according to claim 24, wherein the polymeric inorganic materials are selected from polyphosphazenes, polysilanes, polysiloxane, polygermanes, polymeric sulfur, polymeric selenium, silicones, and mixtures of any of the foregoing.

26. (Withdrawn) A prepreg according to claim 24, wherein the non-polymeric inorganic materials are selected from graphite, metals, oxides, carbides, nitrides, borides, sulfides, silicates, carbonates, sulfates, hydroxides, and mixtures of any of the foregoing.

27. (Withdrawn) A prepreg according to claim 24, wherein the polymeric organic materials are selected from thermosetting materials, thermoplastic materials, and mixtures thereof.

28. (Withdrawn) A prepreg according to claim 27, wherein the polymeric organic materials are thermosetting materials selected from thermosetting polyesters, vinyl esters, epoxy materials, phenolics, aminoplasts, thermosetting polyurethanes and mixtures of any of the foregoing.

29. (Withdrawn) A prepreg according to claim 27, wherein the polymeric organic materials are thermoplastic materials selected from thermoplastic polyesters, polycarbonates, polyolefins, acrylic polymers, polyamides, thermoplastic polyurethanes, vinyl polymers and mixtures of any of the foregoing.

30. (Withdrawn) A prepreg according to claim 24, wherein the composite materials are selected from particles that have a hardness at their surface that is different from the hardness of the internal portions of the particle beneath its surface.

31. (Withdrawn) A prepreg according to claim 30, wherein the composite materials are selected from particles formed from a primary material that is coated, clad or encapsulated with at least one secondary material.

32. (Withdrawn) A prepreg according to claim 30, wherein the composite materials are selected from particles formed from a primary material that is coated, clad or encapsulated with a differing form of the primary material.

33 (Withdrawn) A prepreg according to claim 23, wherein the particles have a thermal conductivity of at least 1 Watt per meter K at a temperature of 300 K.

34. (Withdrawn) A prepreg according to claim 23, wherein the particles have a Mohs' hardness value which does not exceed the Mohs' hardness value of any glass fiber in the at least one strand.

35. (Withdrawn) A prepreg according to claim 23, wherein the particles have an average particle size sufficient to allow strand wet out.

36. (Withdrawn) A prepreg according to claim 23, wherein the particles have an average particle size, measured according to laser scattering techniques, ranging from 0.1 to 5 microns.

37. (Withdrawn) A prepreg according to claim 23, wherein the compatible coating further comprises at least one lubricious material different from the plurality of particles.

38. (Withdrawn) A prepreg according to claim 23, wherein the compatible coating further comprises at least one film-forming material.

39. (Withdrawn) A prepreg according to claim 22, wherein the compatible coating has a loss on ignition of ranging from 0.1 to 1.6, and an air permeability, measured according to ASTM D 737, of no greater than 10 standard cubic feet per minute per square foot.

40. (Currently Amended) An electronic support comprising

(a) at least one non-degreased fabric comprising at least one strand comprising a plurality of fibers, wherein said at least one non-degreased fabric has an air permeability, measured according to ASTM D 737, of no greater than 10 standard cubic feet per minute per square foot, and wherein at least a portion of the fabric has a resin compatible coating which is compatible with a matrix material; and

(b) at least one matrix material on at least a portion of the at least one fabric; wherein the resin compatible coating comprises a plurality of particles, wherein said particles are formed from materials selected from:

non-polymeric inorganic materials selected from graphite, metals, carbides, nitrides, borides, sulfides, carbonates, sulfates, and mixtures thereof;

polymeric inorganic materials;

polymeric organic materials;

non-polymeric organic materials;

composite materials; and

mixtures of any of the foregoing, and

wherein the particles have a Mohs' hardness value which does not exceed the Mohs' hardness value of any glass fiber in the at least one strand, and the particles have an average particle size sufficient to allow strand wet out.

41. (Canceled)

42. (Canceled)

43. (Previously Presented) An electronic support according to claim 40, wherein the particles have an average particle size sufficient to allow strand wet out.

44. (Previously Presented) An electronic support according to claim 40, wherein the particles have an average particle size, measured according to laser scattering techniques, ranging from 0.1 to 5 microns.

45. (Previously Presented) An electronic support according to claim 40, wherein the resin compatible coating further comprises at least one lubricious material different from the plurality of particles.

46. (Previously Presented) An electronic support according to claim 40, wherein the resin compatible coating further comprises at least one film-forming material.

47. (Previously Presented) An electronic support according to claim 40, wherein the compatible coating has a loss on ignition of ranging from 0.1 to 1.6; and said at least one non-degreased fabric has an air permeability, measured according to ASTM D 737, of no greater than 10 standard cubic feet per minute per square foot.

48. (Withdrawn) A method of forming an electronic support comprising:

(a) obtaining a fabric adapted to reinforce an electronic support by weaving at least one fill yarn comprising a plurality of fibers and having a first resin compatible coating on at least a portion of the at least one fill yarn and at least one warp yarn comprising a plurality of fibers and having a second resin compatible coating on at least a portion of the at least one warp yarn;

(b) at least partially coating at least a portion of the fabric with a matrix material resin;

(c) at least partially curing the coating into the at least a portion of the fabric to form a prepreg layer; and

(d) laminating one or more prepreg layers together with one or more electrically conductive layers to form the electronic support.

49. (Withdrawn) An electronic circuit board comprising:

(a) an electronic support comprising

(i) at least one non-degreased fabric comprising at least one strand comprising a plurality of fibers, wherein at least a portion of the fabric has a coating which is compatible with a matrix material; and

(ii) at least one matrix material on at least a portion of the at least one fabric; and

(b) an electrically conductive layer, the support and the conductive layer being contained in the electronic circuit board.

50. (Withdrawn) An electronic circuit board according to claim 49, wherein the compatible coating comprises a plurality of particles.

51. (Withdrawn) An electronic support according to claim 50, wherein the particles are formed from materials selected from polymeric inorganic materials, non-polymeric inorganic materials, polymeric organic materials, non-polymeric organic materials, composite materials, and mixtures of any of the foregoing.

52. (Withdrawn) An electronic support according to claim 50, wherein the particles have an average particle size sufficient to allow strand wet out.

53. (Withdrawn) An electronic support according to claim 50, wherein the particles have an average particle size, measured according to laser scattering techniques, ranging from 0.1 to 5 microns.

54. (Withdrawn) An electronic support according to claim 50, wherein the compatible coating further comprises at least one lubricious material different from the plurality of particles.

55. (Withdrawn) An electronic support according to claim 50, wherein the compatible coating further comprises at least one film-forming material.

56. (Withdrawn) An electronic support according to claim 49, wherein the compatible coating has a loss on ignition of ranging from 0.1 to 1.6, and an air permeability, measured according to ASTM D 737, of no greater than 10 standard cubic feet per minute per square foot.

57. (Withdrawn) A method of forming a printed circuit board comprising

(a) obtaining an electronic support comprising one or more electrically conductive layers and at least one fabric adapted to reinforce the electronic support formed by weaving at least one fill yarn comprising a plurality of fibers and having a first resin compatible coating on at least a portion of the at least one fill yarn and at least one warp yarn comprising a plurality of glass and having a second resin compatible coating on at least a portion of the at least one warp yarn; and

(b) patterning at least one of the one or more electrically conductive layers of the electronic support to form a printed circuit board.

58. (Withdrawn) A method for forming an aperture through a layer of fabric of an electronic system support for an electronic circuit board by:

(1) positioning an electronic system support comprising a portion of a layer of fabric comprising a coated fiber strand comprising a resin compatible coating

composition on at least a portion of a surface of the fabric, in which an aperture is to be formed in registry with an aperture forming apparatus; and

- (2) forming an aperture in the portion of the layer of fabric.